

AMENDMENTS TO THE SPECIFICATION:

Page 1, please add the following new paragraphs before paragraph [0001]:

[0000.2] CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.4] This application is a 35 USC 371 application of PCT/EP 2004/053484
filed on December 15, 2004.

[0000.6] BACKGROUND OF THE INVENTION

Please replace paragraph [0001] with the following amended paragraph:

[0001] ~~Prior Art~~ **Field of the Invention**

Please add the following new paragraphs after paragraph [0001]:

[0001.2] This invention relates to electrical machines, and more particularly to an improved
stator assembly for an electrical machine.

[0001.4] Description of the Prior Art

Page 2, please replace paragraph [0003] with the following amended paragraph:

[0003] ~~Advantages of the Invention~~

SUMMARY AND ADVANTAGES OF THE INVENTION

Please replace paragraph [0004] with the following amended paragraph:

[0004] The stator assembly of the invention ~~having the characteristics of claim 1~~ has the
advantage over the prior art that it can be produced especially simply and economically, in
particular by deep drawing or extrusion **of the housing**. A housing of the stator assembly has
at least one axially extending and inward-oriented bead. Securing of the stator to the housing

Applicant: Eberhard LUNG et al
Docket No. R.307198
Preliminary Amdt.

is possible at the bead formed in the housing. By means of the resiliently designed bead, a secure connection between the housing and the stator can be assured.

Please delete paragraph [0005].

Page 3, please replace paragraph [0010] with the following amended paragraph:

[0010] Preferably, a plurality of beads are embodied on the housing and on the stator and are spaced apart equally from one another in the circumferential direction. Especially preferably, four ~~of the~~ or six beads each, because of the measurability of the ~~coaxialities~~ coaxiality, are formed on the housing and on the stator.

Page 4, please replace paragraph [0013] with the following amended paragraph:

[0013] The stator is preferably made from many stator laminations made of sheet steel, and the housing is likewise made from a steel sheet, so that during the operation of the electrical machine, no negative influences occur from loosening or high pressure at high and low temperature because of different thermal expansions, ~~or~~ of shrinkages in the cold of the housing and the stator. Also preferably, guide faces for securing a second bearing cap are embodied on the housing. In particular with a bearing cap integrated with the housing, for supporting the armature shaft, an especially high coaxiality between the stator and an armature supported on the housing can be achieved.

Page 5, please replace paragraph [0016] with the following amended paragraph:

[0016] Drawing **BRIEF DESCRIPTION OF THE DRAWINGS**

Please replace paragraph [0017] with the following amended paragraph:

[0017] Preferred exemplary embodiments of the invention are described below in conjunction with the accompanying drawings, in which [.] ~~In the drawings:~~

Page 6, please replace paragraph [0027] with the following amended paragraph:

[0027] ~~Description of the Exemplary Embodiments~~

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please replace paragraph [0028] with the following amended paragraph:

[0028] Below, referring to Figs. 1 through 6, a stator assembly 1 in a first exemplary embodiment of the present invention ~~will be described. As shown in Figs. 1 and 6, the stator assembly 1 of the invention~~ includes a substantially cylindrical housing 2 and a stator 4.

Please replace paragraph [0029] with the following amended paragraph:

[0029] Fig. 2 shows a sectional view of the housing 2. In the axial direction X-X, six inward-oriented beads 3 are embodied. The beads 3 are disposed along the circumference of the housing 2, at equal spacings from one another. In the axial direction X-X, the beads 3 have a length L, which corresponds to a length l of the stator 4 (see Figs. 1 and 5). The stator 4 is put together in a known way from many individual stator laminations 4a. As can be seen particularly from Fig. 3, there are likewise six inward-oriented beads or notches 5, spaced equally apart along the circumference, embodied on the outer circumference of each stator lamination 4a.

Please replace paragraph [0030] with the following amended paragraph:

[0030] Fig. 6 now shows the installed state of the stator lamination packet in the housing 2. The stator laminations are disposed in the housing 2 such that **the location of** the beads 5 each correspond to the beads of the housing 2. At each bead 3 of the housing, the result is four **contact or** connecting points A, B, C and D. Between the individual connecting points A, B, C, D, there are respective interstices in the form of gaps S1, S2, S3, S4, S5. More precisely, as shown in Fig. 6, one gap S3 is formed at the lowest point of the bead 5 of the stator 4. ~~A gap S3~~ **Gaps S2** and S4 ~~[[is]]~~ **are** also formed between the respective connecting points A and B on the one hand and C and D on the other between the housing 2 and the stator 4; the gaps S2 and S4 are formed at the transition of the stator from the respective bead 5 to the normal outer circumference of the stator.

Page 7, please replace paragraph [0031] with the following amended paragraph:

[0031] The housing 2 thus receives the many stator laminations 4a that form the stator, positions the stator, and ~~fixes~~ **positions** it in such a way that it is fixed ~~in a clamped way~~ via a clamping action between the housing and the stator laminations. Because of the many stator laminations, the result is linear connecting points between the stator 4 and the housing 2.

Please replace paragraph [0032] with the following amended paragraph:

[0032] The housing 2 is made from ~~[[a]]~~ **sheet** steel ~~sheet~~ and the individual stator laminations 4a are likewise made from sheet steel, so that a thermal change has no influence on the fixation of the stator in the housing 2 over the entire temperature spectrum. Because of the connection between the housing 2 and the individual stator laminations 4a only at some

points, the beads 3 exert a resilient prestressing force on the stator 4, and the prestressing force can be varied as a function of the shape of the bead, for instance the depth of the bead, and/or the radius of the bead. A further possible way of varying the spring force is a suitable choice of a thickness for the housing 2.

Please replace paragraph [0036] with the following amended paragraph:

[0036] Unlike the first exemplary embodiment, in the second exemplary embodiment a bearing **support** 6 for the armature shaft is also formed integrally on one end of the housing 2. The housing 2 is made by deep drawing, for instance. On the other end of the ~~[[cap]]~~ **housing** 2, a second bearing **support or cap** can also be inserted in a simple way in the region 2b. To that end, a small shoulder is formed in the region 2b of the housing 2, so that the region 2b serves as a guide ring for an insertion of a second bearing with an armature shaft. This enables very good coaxiality of the armature shaft relative to the housing and thus also to the stator.

Page 9, please replace paragraph [0040] with the following amended paragraph:

[0040] The third exemplary embodiment is identical in particular to the second exemplary embodiment in terms of the characteristic that an integral bearing **support** 6 is embodied on the housing 2. In addition to the bearing **support** 6, three securing openings 7 are also integrally embodied on the housing 2. As a result, the housing 2 can be secured to a component. As Fig. 9 also shows, for securing a bearing cap, many recesses 8, which are essentially T-shaped, are embodied on the other end of the housing 2. Once again, seals or the

Applicant: Eberhard LUNG et al
Docket No. R.307198
Preliminary Amdt.

like may be provided in the region 2b of the housing 2 as in the second exemplary embodiment.

Please add the following new paragraph after paragraph [0040]:

[0041] The foregoing relates to a preferred exemplary embodiment of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.